

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,387	06/27/2001	Yoshihiro Takashimizu	010803	2563
38834 759 WESTERMAN, I	90 03/20/2007 HATTORI, DANIELS	EXAMINER		
1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			CHANKONG, DOHM	
			ART UNIT	PAPER NUMBER
			2152	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS 03/20/2007		03/20/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)		
	09/891,387	TAKASHIMIZU ET AL.		
Office Action Summary	Examiner	Art Unit		
	Dohm Chankong	2152		
The MAILING DATE of this communicated for Reply	ation appears on the cover sheet w	th the correspondence address		
A SHORTENED STATUTORY PERIOD FOR WHICHEVER IS LONGER, FROM THE MAIN - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this communing of the provided for reply is specified above, the maximum statuser of the provided for reply within the set or extended period for reply wi	ILING DATE OF THIS COMMUNI 37 CFR 1.136(a). In no event, however, may a sication. tory period will apply and will expire SIX (6) MON II, by statute, cause the application to become Al	CATION. reply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).		
Status				
 Responsive to communication(s) filed This action is FINAL. Since this application is in condition fo closed in accordance with the practice) This action is non-final. or allowance except for formal mat	•		
Disposition of Claims				
4)	withdrawn from consideration.			
Application Papers				
9) The specification is objected to by the 10. The drawing(s) filed on is/are: a Applicant may not request that any objection Replacement drawing sheet(s) including the 11. The oath or declaration is objected to be	a) accepted or b) objected to on to the drawing(s) be held in abeyang correction is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some col None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	O-948) Paper No(Summary (PTO-413) s)/Mail Date nformal Patent Application 		

Art Unit: 2152

DETAILED ACTION

- This action is in response to Applicant's remarks, filed 12.19.2006. Claims 1-5, 7-9 and 12-19 are presented for further examination.
- 2> This is a final rejection.

Response to Arguments

I. THE §112, FIRST PARAGRAPH AND SECOND PARAGRAPH REJECTIONS ARE WITHDRAWN.

Applicant's arguments with respect to the §112, first paragraph rejection have been considered and they are persuasive. Additionally, Applicant's amendment resolves the §112, second paragraph issues. Therefore the §112 rejections are withdrawn.

II. <u>APPLICANT'S ARGUMENTS WITH RESPECT TO THE §103 REJECTIONS ARE NOT PERSUASIVE.</u>

Applicant's response to the non-final rejection filed 9.19.2006 set forth two primary arguments. First, Applicant argues that the Mikkonen, Wang and Ma rejection is improper because Mikkonen teaches away from the claimed invention by disclosing an apparatus with different IP addresses. Applicant further argues that reducing Mikkonen's apparatus to a single IP address would destroy the purpose of fault tolerance and redundancy sought by Mikkonen's apparatus. Second, Applicant argues that the AAPA and Lelaure rejection and the Lelaure and Wang rejection are improper because Lelaure discloses a second basis unit with two addresses. Applicant's arguments concerning both rejections have been considered but they are not persuasive for the reasons set forth below.

Application/Control Number: 09/891,387 Art Unit: 2152

A. <u>Mikkonen does not teach away from the claimed invention and modifying</u>
<u>Mikkonen to include only a single IP address would not destroy its purpose.</u>

Applicant argues that Mikkonen teaches away from the claimed invention by disclosing a single node having multiple IP addresses assigned to different interfaces at the node. Focusing on a single node, Applicant argues that the IP addresses of the interfaces are different from one another. While Applicant's characterization of Mikkonen's single node is accurate, the argument's reliance on the single node is misplaced because the analysis should focus on the two nodes taught in Mikkonen's system.

Mikkonen discloses a first node with an interface assigned an IP address IPA and a second node with an interface assigned an IP address IPA as well [Figure 1 «items 110a, 110e»]. The interface on the second node is inactive when the interface on the first node is active [column 3 «lines 35-39»]. Mikkonen clearly states that only one interface on the node is active at a time; so when the first node is active in the network, only its interface with the IPA address is active. If the first node's interface fails, then the interface with the same IP address (IPA) of the second node is activated. Interpreting Mikkonen's first and second nodes as corresponding to Applicant's claimed first and second basic units, Mikkonen's functionality is analogous to the claimed functionality of Applicant's apparatus whereby a first basic unit can be switched with a second basic unit when the first basic unit fails.

The difference between Mikkonen and the claimed invention is that Mikkonen discloses that there can be more than one address assigned to each node. It should be noted that this only conflicts with the claim language regarding the second basic unit. There is no claim language restricting how many addresses can be assigned to the first basic unit.

Application/Control Number: 09/891,387 Art Unit: 2152

Ma was relied upon to teach the benefit of reducing the number of IP addresses assigned to Mikkonen's nodes to a single IP address rather then the multiplicity found in Mikkonen's invention. Ma expressly discloses that having multiple IP addresses "is undesirable, because registering IP addresses with a DNS is both costly and cumbersome, and the number of available IP addresses is limited" [column 2 «lines 50-53»]. Having a single IP address assigned to multiple devices "alleviates these problems by enabling a network administrator to configure and manage a group of switches using a single IP address" [column 2 «lines 56-61»].

Applicant argues that such a combination destroys Mikkonen's purpose of providing fault tolerance and redundancy. This argument is undercut by Ma's express teaching that providing redundancy and fault tolerance is still possible when using a single IP address assigned to multiple devices within a cluster (apparatus) [column 3 «lines 44-55»]. That is, Mikkonen's fault tolerance and redundancy goals are still maintained because Ma simply removes the additional IP addresses from Mikkonen's first and second nodes (IPB, IPC, IPD).

The proposed combination leaves Mikkonen with a single IP address, IPA, at both nodes which, according to Ma, is more desirable. Fault tolerance and redundancy is maintained because there are still two nodes that back each other up in case the other fails. Reducing the number of IP addresses does not affect the ability of Mikkonen's system to provide fault tolerance because Ma discloses that if the master switch in a cluster fails, a backup takes over but still has the same address as the master.

Art Unit: 2152

Therefore, contrary to Applicant's argument, the proposed combination would not result in destroying Mikkonen's purpose. The combination teaches assigning a single IP address to multiple devices while maintaining the ability to provide fault tolerance through the implementation of multiple relay nodes within a single relay apparatus. This functionality reads on Applicant's limitations as they are currently written.

B. <u>Lelaure teaches the claimed limitation of setting into the second basic unit only the same network address as the first basic unit.</u>

Applicant argues that Lelaure does not teach the limitation of setting the same network address into the second basic unit. Applicant points to the fact that Lelaure teaches two IP addresses, IPs and IPn. But Applicant's claim language does not proscribe interpreting Lelaure in a manner that reads on the claimed invention.

The language in question recites "a second basic unit into which only the same network address as that of said first basic unit is set." Nothing in this language proscribes the second basic unit from having a different network address before setting the same network address as that of the first basic unit into the second basic unit. Lelaure discloses that the second basic unit had an IP address of IPs, when the first basic unit fails, the first basic unit's IP address is set into the second basic unit [column 1 «lines 36-40»]. This functionality reads on Applicant's claim because only the same network address as that of the first basic unit is set into the second basic unit, the previous IP address (IPs) having been replaced by the same IP address of the first basic unit (IPn) [column 3 «lines 26-39»]. More precisely, Lelaure discloses that the second basic unit only is set with one network address at a time; thus when the network address of the first basic unit is set into the second basic unit, only the same

Application/Control Number: 09/891,387 Art Unit: 2152

network address is set because the previous address (IPs) is no longer set into the second basic unit. Thus, as the claims are currently written, Lelaure reads on the claimed limitations.

III. CONCLUSION

For the foregoing reasons, Applicant's arguments were not persuasive. Applicant is encouraged to amend the claim to more clearly and precisely define the limitations as to the functionality of setting the network address into the first and second basic units. As currently written, the claim language only recites setting the same network address into the second basic unit; as interpreted by one of ordinary skill in the art, the language does not mandate that other addresses can be set into the second basic unit before the same network address is replaces them. As such, the claim rejections set forth in prior Office actions, filed on 9.19.2006 are maintained.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claims 1-5, 7-9 and 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - a. Claim 1 is rejected for lacking proper antecedent basis: "the basic unit of a standby system." Nothing in the claim previously described a basic unit as a standby system.
 - b. Dependent claims are rejected as a result of their dependency on claim 1.

Art Unit: 2152

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Since no claims were substantively amended by Applicant, no claims are specifically addressed in this section. The substance of these rejections can be found in prior Office actions, filed 9.19.2006, 4.17.2006 and 11.14.2005. Only the headings are reproduced here to reiterate the rejections.
- Claim 1 is rejected under 35 U.S.C § 103(a) as being unpatentable over Mikkonen, in view of in view of Wang, in further view of Ma et al, U.S Patent No. 6.856.691 ["Ma"].
- 6> Claims 2-5, 7 and 12 are rejected under 35 U.S.C § 103(a) as being unpatentable over Mikkonen, Ma and Wang, in further view of Ould-Ali et al, U.S Patent No. 5.649.091 ["Ould-Ali"] and Li et al, U.S Patent No. 5.473.599 ["Li"].
- 7> Claims 8 and 9 are rejected under Mikkonen, Ma, Ould-Ali, Li and Wang, in further view of AAPA.

- 8> Claims 15-17 are rejected under 35 U.S.C § 103(a) as being unpatentable over AAPA, in view of Mikkonen, in further view of Ma.
- 9> Claim 18 is rejected under 35 U.S.C § 103(a) as being unpatentable over AAPA, MA and Mikkonen, in further view of Wang.
- 10> Claim 19 is rejected under 35 U.S.C § 103(a) as being unpatentable over AAPA, MA and Mikkonen, in further view of Ould-Ali.
- Claim 1 is rejected under 35 U.S.C § 103 (a) as being unpatentable over Applicant's admitted prior art ["AAPA"], in view of Lelaure et al, U.S Patent No. 6.640.314 ["Lelaure"].
- Claim 2 is rejected under 35 U.S.C § 103(a) as being unpatentable over AAPA and Lelaure, in further view of Wang et al, U.S Patent No. 6.587.970 ["Wang"].
- Claim 1 is rejected under 35 U.S.C § 103(a) as being unpatentable over Lelaure, in view of in view of Wang.
- Claims 2-5, 7 and 12 are rejected under 35 U.S.C § 103(a) as being unpatentable over Lelaure and Wang, in further view of Ould-Ali et al, U.S Patent No. 5.649.091 ["Ould-Ali"] and Li et al, U.S Patent No. 5.473.599 ["Li"].

Art Unit: 2152

- Claims 8 and 9 are rejected under Lelaure, Ould-Ali, Li and Wang, in further view of AAPA.
- 16> Claims 15-17 are rejected under 35 U.S.C § 103(a) as being unpatentable over AAPA, in view of Lelaure.
- 17> Claim 18 is rejected under 35 U.S.C § 103(a) as being unpatentable over AAPA and Lelaure, in further view of Wang.
- 18> Claim 19 is rejected under 35 U.S.C § 103(a) as being unpatentable over AAPA and Lelaure, in further view of Ould-Ali.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Murono et al, U.S Patent No. 5.793.769;

Adelman et al, U.S Patent No. 6.006.259;

Dobbins et al, U.S Patent no. 6.249.820;

Tsukakoski et al, U.S Patent No. 6.496.510;

Matsukawa, U.S Patent No. 6.810.010;

Lundbäck et al, U.S Patent No. 6.912.590.

Art Unit: 2152

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is 571.272.3942.

The examiner can normally be reached on Tuesday-Friday [7:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571.272.3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2152

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC

BUNJOB JAPOEN CHONWANIT SUPERVISORY PATENT EXAMINER